

Abstract

A two-wire sensor (S) is connected to a pole via a first connection line (V1) in which a voltage longitudinal controller (SR) and a current-limiting resistor (R1) are positioned, and via a second connection line (V2) to which the other pole of a power supply source is connected. The output of the voltage longitudinal controller (SR) is connected to the second connection line (V2) via a first limiting diode (D1) and a second limiting diode (D2) which preferably is installed opposite the first connected diode. The joint node of the two limiting diodes (D1, D2) is connected to the control input of the voltage longitudinal controller (SR).